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08/974,545	11/19/97	FARMER	C 2207/4641

023838
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1500 K STREET, N.W., SUITE 700
WASHINGTON DC 20005

MM21/0606

EXAMINER

LEA EDMONDS, L

ART UNIT

PAPER NUMBER

2835

DATE MAILED: 06/06/01

Please find below and/or attached an Office communication concerning this application or proceeding.

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BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Paper No. 17

Application Number: 08/974,545
Filing Date: November 19, 1997
Appellant(s): FARMER, CHRISTOPHER B.

John C. Altmiller
For Appellant

EXAMINER'S ANSWER

This is in response to appellant's brief on appeal filed March 15, 2001.

(1) *Real Party in Interest*

A statement identifying the real party in interest is contained in the brief.

(2) *Related Appeals and Interferences*

The brief does not contain a statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief. Therefore, it is presumed that there are none. The Board, however, may exercise its discretion to require an explicit statement as to the existence of any related appeals and interferences.

(3) *Status of Claims*

The statement of the status of the claims contained in the brief is correct.

(4) *Status of Amendments After Final*

No amendment after final has been filed.

(5) *Summary of Invention*

The summary of invention contained in the brief is correct.

(6) *Issues*

The appellant's statement of the issues in the brief is correct.

(7) *Grouping of Claims*

Appellant's brief includes a statement that claims 1-18 do not stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8). Please note that appellant's brief fails to comply with section (c)(8) of 37 CFR 1.192. Which states

appellant must explain why the claims of the group are believed to be separately patentable in the arguments (see 37 CFR 1.192).

(8) Claims Appealed

A substantially correct copy of appealed claims 11 and 13 appears on page 12 and 13 respectfully of the Appendix to the appellant's brief. The minor errors are as follows: in claim 11, page 12; it appears that claims 11 and 12 were combined. Therefore claim 11 should read as follows: The mount of claim 8, wherein said lock comprises a clear plate for covering said slot in said case, and a lock assembly for locking said plate to said case. In claim 13, page 13 it appears applicant has incorporate the amended error of the amendment dated May 4, 2000. In this amendment applicant amended claim 13 as if it were claim 14. The examiner stated to the applicant the mistake and also that claim 13 has not been amended. Therefore, claim 13 still stands as originally filed: The mount of claim 12, wherein said guides include a pair of guide slots connected to said motherboard, and a pair of guide rails connected to said processor, with said guide clots configured to receive said guide rails (sic).

(9) Prior Art of Record

5,530,620	Sangveraphunsiri	6-1996
5,603,618	Hayakawa et al.	2-1997
5,748,446	Feightner et al.	5-1998
5,576,935	Freer et al.	11-1996

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(10) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

Claim Rejections - 35 USC § 102

I. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

II. Claims 16 and 17 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Sangveraphunsiri. With respect to claims 16 and 17, Sangveraphunsiri discloses the method steps as claimed (see for example figures 21 and 22).

Claim Rejections - 35 USC § 103

III. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

IV. Claims 1-5 and 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sangveraphunsiri in view of Hayakawa et al.. With respect to claims 1-4 and 8, Sangveraphunsiri discloses a computer system with a processor cartridge (520) displaced from the motherboard and having an edge connector (546), a processor (108), a motherboard connector (548') to be mounted on a motherboard (104), a lock (see for example figure 15), and guides to restrain the processor (see for example figures 21 and 22). However, Sangveraphunsiri lacks a clear teaching of the guide rails and guide slots structure and the motherboard being connected to the edge connector in a parallel orientation as claimed. Hayakawa et al. teaches a mounting board unit having a motherboard (1-1) with a connector (1-2) being connected in a parallel orientation to the edge connector (2-3) of a processor board (2-1), and guide rails, guide slots, and the motherboard being connected to the edge connector in a parallel orientation as claimed (see for example any of figures 1-5). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the

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teachings of Hayakawa et al. into the apparatus of Sangveraphunsiri to protect the connectors from damage do to misalignment. With respect to claim 5, both Sangveraphunsiri and Hayakawa et al. teach a case having an interior side and an exterior side, however neither teaches the processor being visible from the exterior side. It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the processor visible from an external side to allow the user and/or the repair person to select the correct model processor prior to repair. With respect to claims 9-11, Sangveraphunsiri teaches a processor cartridge having a lock (572) and a plate (510) covering the slot, however, Sangveraphunsiri lacks the lock being a teeth lock or a spring lock and the plate being clear. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use any of the well known means to secure the cartridge processor into the computer to prevent theft and also to provide the computer with a clear slot cover to allow the user to view the cartridge processor.

V. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sangveraphunsiri in view of Hayakawa et al. as applied to claim 1 above, and further in view of Feightner et al.. With respect to claims 6 and 7, Sangveraphunsiri in view of Hayakawa et al. teaches the invention as claimed in claim 1, however Sangveraphunsiri in view of Hayakawa et al. lacks the processor and/or the motherboard having a heat sink. Feightner et al. teaches a heat sink support being connected to the processor via the motherboard (see for example column 3 lines 20-35). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Feightner et al. into the apparatus of Sangveraphunsiri in view of Hayakawa et al. to provide the processor and/or motherboard with a heat sink as it is a well known devices use to remove heat.

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VI. Claims 12-15 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sangveraphunsiri in view of Hayakawa et al. and further in view of Freer et al..

With respect to claims 12-15, Sangveraphunsiri discloses a computer system with a processor cartridge (520) displaced from a mother board and having an edge connector (546), a processor (108), a motherboard connector (548') to be mounted on a motherboard (104), a lock (see for example figure 15), and guides to restrain the processor (see for example figures 21 and 22). However, Sangveraphunsiri lacks a clear teaching of the guide rails and guide slots structure and the motherboard being connected to the edge connector in a parallel orientation and a motherboard having a receiving slot for receiving a processor as claimed. Hayakawa et al. is relied upon for its teachings of a mounting board unit having a motherboard (1-1) with a connector (1-2) being connected in a parallel orientation to the edge connector (2-3) of a processor board (2-1), and guide rails, guide slots, and the motherboard being connected to the edge connector in a parallel orientation as claimed (see for example any of figures 1-5). Freer et al. teaches a motherboard having a receiving slot for receiving a processor (see for example any of figures 4-6). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Hayakawa et al. and Freer et al. into the apparatus of Sangveraphunsiri to protect the motherboard and processor connectors from damage do to misalignment. With respect to claim 18, the apparatus of Sangveraphunsiri as modified by the teachings of Hayakawa et al. and Freer et al. would inherently teach the method claims as claimed.

(11) Response to Argument

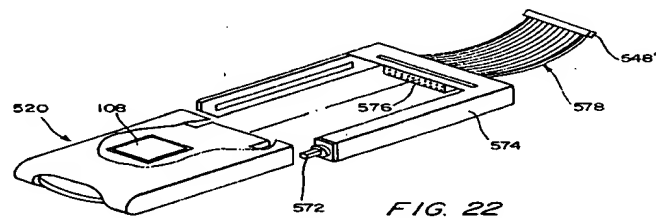
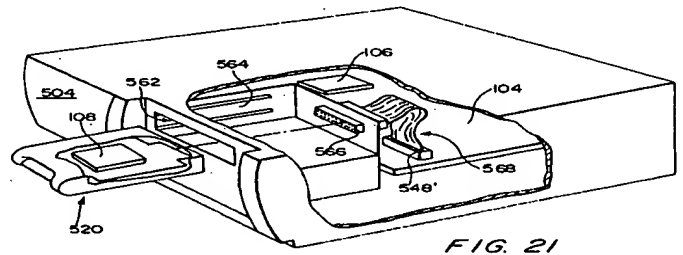
With respect to appellant's arguments filed in the appellant's brief dated March 14, 2001 beginning of page 5 thereof. It appears to the examiner of record that applicant has choose to focus the arguments toward elements of the prior arts of record which the examiner did not use to reject the instant claims. With respect to the teachings of Sangveraphunsiri, as stated in the previous office actions, the examiner believes figures 21 and 22 are representative of appellant's claimed invention. Figures 21 and 22 clearly show a method of mounting a cartridge processor having an edge connector on a motherboard comprising: inserting the edge connector of the processor in a connector on the motherboard in a parallel orientation to and displaced from the motherboard and restraining the processor from movement in directions mutually perpendicular to the first direction.

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It is noted that the examiner could have used these teachings to reject claim 1 under 102, however, the examiner believed the 103 rejection as stated above showed and taught the claimed invention clearer in both the figures and the specification. Therefore claim 1 was not rejected under 102 with claims 16 and 17. However, in figures 21 and 22 above, it is clearly shown a mount (562) to receive a cartridge processor (520) having an edge connector; and a motherboard (104) having a connector (548'). It is also clear to see the parallel orientation of the processor cartridge, however, the

examiner believed that a clearer teaching is found in Hayakawa et al. (figures 1-5). As seen, Hayakawa et al. shows the processor cartridge and the motherboard connected in "direct" parallel orientation along with guide rails and slots. It is noted that the appellant failed to limit the claims to omit the cable

structure of Sangveraphunsiri, thus allowing the examiner of record to reject the instant claims with prior art which may teach more than what is claimed without deviating from the scope of the instant claimed invention.

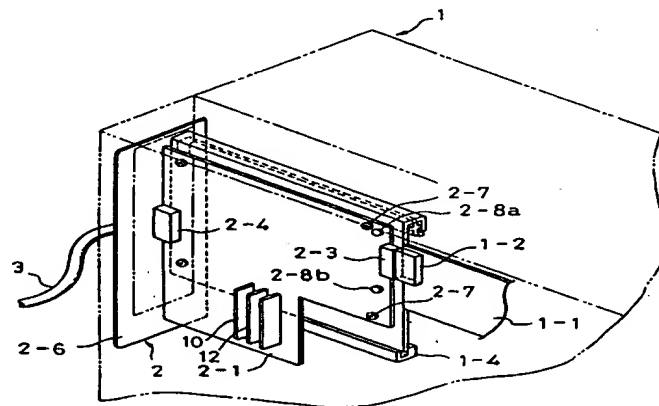
U.S. Patent

Feb. 18, 1997

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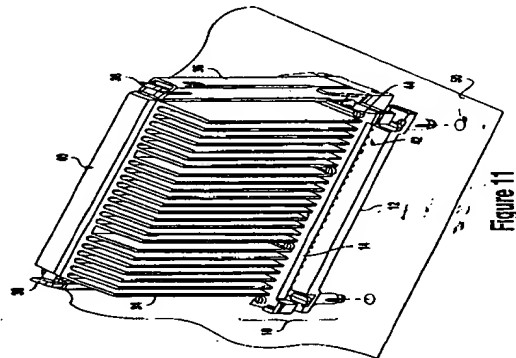
5,603,618

FIG. 1

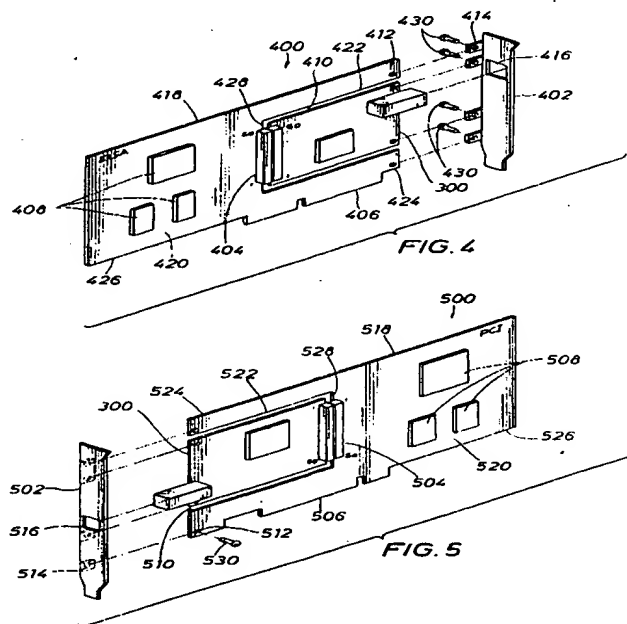


With respect to the prior art of Feightner et al. and Freer et al., the examiner again believes that the appellant is focusing on aspects of the prior art which the examiner is not relying upon. Feightner et al. is relied upon for its teaching of the use of a heat sink with the supporting structure being mounted onto a processor cartridge as claimed. The use of heat sinks and fans along with the needed support structure are so notoriously known in the art as means to dissipate heat from a processor cartridge that it has become standard in the art to do so. Freer et al. is relied upon for its teaching of a receiving slot connected to the motherboard and configured to receive a connector of a processor as shown in figures 3A-6. Further, with respect to appellant's arguments toward the instant claims being distinguished over the prior art of record (section 1 claims 16 and 17), the examiner would again point out that appellant

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has not limited the instant claims in such a way as to omit intermediate steps (i.e. the cable and connectors as taught by Sangveraphunsiri) to achieve the parallel orientation as claimed. Also, appellant has not claimed a direct connection (direct meaning no intermediate connections therebetween) thus allowing the examiner to reject the claims with prior art which may teach more than appellant claims. Therefore, the examiner believes claims 16 and 17 are anticipated by the teachings of figures 21 and 22 of Sangveraphunsiri along with the teachings contained in the specification concerning figures 21 and 22. With respect to section 2 claims 1-5 and 8-11, again as stated above, appellant has not claimed a direct connection (direct meaning no intermediate connections therebetween) thus allowing the examiner to reject the claims with prior art which may teach more than appellant claims. With respect to the teachings of Hayakawa et al., again the examiner believes the appellant is focusing on other teachings of Hayakawa et al. in stead of the relied upon teachings. Hayakawa et al. is relied upon for its teaching of the processor cartridge and the motherboard connected in "direct" parallel orientation along with guide rails and slots. Nevertheless, Sangveraphunsiri teaches what appears to be guide rails and slots, however the specification lacks details and thus the examiner did not use Sangveraphunsiri as a sole reference to reject the instant claims. Thus the combination with the clear teachings of Hayakawa et al. With respect to sections 3, 4, and 5; it appears to the examiner that the appellant has relied upon the argument of Sangveraphunsiri and Hayakawa et al. to provide reasoning for claims 6, 7, 12-15, and 18 to be allowed. The examiner would like to point out that appellant stated that the claims do not stand or fall together, however, it appears that by the lack of argument toward the remaining claims the appellant now believes that all claims rejected under the teachings of Sangveraphunsiri in view of Hayakawa et al. that all claims thereof do in fact stand or fall together. The examiner of

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record stands firmly behind the above rejections as well and the reply to appellant's arguments. Therefore the examiner of record respectfully request that the Board of Patent Appeals and Interferences uphold the examiner's decision rejecting claims 1-18.

It is noted that an appeal conference was held on May 24, 2001 with the examiner of record Lisa Lea-Edmonds, the SPE of AU 2835 Leo Picard as well as Art Grimley.

For the above reasons, it is believed that the rejections should be sustained.

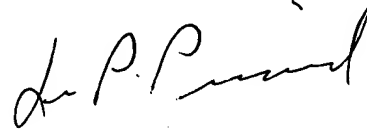
Respectfully submitted,

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